WHAT IS CLAIMED IS:

1.   A system for displaying a driving scene to a driver of an automobile, the system comprising: a) at least one camera having a field of view and facing in the forward direction of the automobile and capturing images of the driving scene, the images comprised of pixels of the field of view in front of the automobile, b) a control unit that receives the images from the camera and applies a salt and pepper noise filtering to the pixels comprising the received images, the filtering improving the quality of the image of the driving scene received from the camera when degraded by a weather condition and c) a display that receives the images from the control unit after application of the filtering operation and displays the images of the driving scene to the driver.

2.   The system as in Claim 1, wherein the salt and pepper noise filtering applied by the control unit is a median filter.

3.   The system as in Claim 1, wherein the salt and pepper noise filtering applied by the control unit is a SUSAN filter.

4.   The system as in Claim 1, wherein the control unit further applies a histogram equalization operation to the intensities of the pixels comprising the filtered images, the histogram equalization operation further improving the quality of the images of the driving scene when degraded by the weather condition.

5. The system as in Claim 4, wherein the control unit further applies image recognition processing to the images following the histogram equalization operation.

6. The system as in Claim 5, wherein the control unit applies image recognizing processing to the images to identify objects therein of at least one predetermined type.

7. The system as in Claim 6, wherein objects of the at least one predetermined type comprise at least one selected from the group of: pedestrians, other automobiles, traffic signs, traffic controls, and road obstructions.

8. The system as in Claim 6, wherein objects of the at least one predetermined type identified in the images are enhanced by the control unit for display by the display.

9. The system as in Claim 6, wherein the control unit further identifies features in the images of at least one predetermined type.

10. The system as in Claim 9, wherein the features of at least one predetermined type identified in the images are enhanced by the control unit for display by the display.

11. The system as in Claim 9, wherein the features of at least one predetermined type comprise borders of the roadway.

12. The system as in Claim 1, wherein the display is a head-up display (HUD).

13. The system as in Claim 1, wherein the control unit further applies image recognition processing to the images following the filtering.

14. A method of displaying a driving scene to a driver of an automobile, the method comprising the steps of: a) capturing images of the driving scene in the forward direction of the automobile, the images comprised of pixels of the field of view in front of the automobile, b) salt and pepper noise filtering the pixels comprising the captured images, the filtering improving the quality of the images of the driving scene captured when degraded by a weather condition and c) displaying the images of the driving scene to the driver after application of the filtering operation.

15. The method as in Claim 14, wherein the step of salt and pepper noise filtering of the pixels comprising the images is followed by the step of applying a histogram equalization to the filtered pixels.

16. The method as in Claim 14, wherein the step of salt and pepper noise filtering of the pixels comprising the images is followed by the step of applying image recognition processing to the filtered pixels.